

## Claims

1. Method for controlling a process flow,  
characterized by the following steps.

- 5           a) A number of ideal characteristic variables of the process  
flow are determined in advance, which in each case  
describe a sub-aspect of the process flow in such a way  
that by means of the ideal characteristic variables a  
desired target process flow of the process flow is  
10           defined,
- b) During the process flow, actual characteristic variables  
of the sub-aspects of the process flow are determined at  
an observation time point, so that the actual state of  
the process flow in the observation time period is  
15           described by means of the actual characteristic  
variables,
- c) By means of a good functional, the deviations of the  
actual characteristic variables from the corresponding  
ideal characteristic variables are determined, with the  
20           changes over time of the actual characteristic variables  
being included by the good functional, and
- d) by means of a visualization system, the ideal  
characteristic variables are represented as an optimum  
point in a center area of a display field of the  
25           visualization system and the actual characteristic  
variables are in each case shown as an actual point at a  
distance from the optimum point, that in each case is in  
a relationship to the deviation of the corresponding  
actual characteristic variable from the corresponding  
30           ideal characteristic variable, with the actual points  
being graphically connected by connecting lines as an  
option so that the area enclosed by the connecting lines  
is a measure of the quality of the process flow in the  
observation time period.

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2. Device for controlling a process flow by means of a data  
processing system,

characterized by

- a storage area in which a number of ideal characteristic variables of the process flow can be stored, that in each case describe a sub-aspect of the process flow such that a desired target process flow of the process flow is defined by means of the ideal characteristic variables,
- a calculation module by means of which actual characteristic variables of the sub-aspects of the process flow can be determined in an observation time period during the process flow, so that the actual state of the process flow in the observation time period is described by means of the actual characteristic variables, and by means of which a good functional can determine the deviations of the actual characteristic variables from the corresponding ideal characteristic variables, with the good functional including the changes over time of the actual characteristic variables, and
- a visualization system by means of which the ideal characteristic variables can be represented as an optimum point in a central area of a display field of the visualization system and the actual characteristic variables can in each case be represented as an actual point at a distance from the optimum point that in each case is in relation to the deviation of the corresponding actual characteristic variable from the corresponding ideal characteristic variable, with the actual points being graphically connected by connecting lines as an option, so that the area enclosed by the connecting lines is a measure of the quality of the process flow in the observation time period.